Docket No. 26068-05E

Examiner: Brenda Coleman

Art Unit: 1624

LISTING OF CLAIMS

Claims 1-2: (Canceled)

- 3. (Currently Amended) A process according to claim 4 26 wherein said preparation is carried out in the presence of a Bronstead acid or a Lewis acid.
- 4. (Original) A process according to claim 3 wherein the acid is selected from the group consisting of camphor sulfonic acid, *para*-toluene sulfonic acid, and BF₃•Et₂O.
- 5. (Original) A process according to claim 4 wherein camphor sulfonic acid is used as a catalyst and dichloroethane is used as a solvent.

Claims 6-7: (Cancelled)

8. (Currently amended) A process according to claim ± 26 wherein a furanose of the formula

is reacted with DMB-protected K252c to give two products of the formulae

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9. (Currently amended) A product prepared according to the process of claim ± 26 .

- 10. (Previously presented) A product prepared according to the process of claim 3.
- 11. (Currently amended) A process according to claim 4 <u>26</u> wherein the furanosylated indolocarbazole prepared is K252a.
- 12. (Currently amended) A process according to claim 4 <u>26</u> wherein the furanosylated indolocarbazoles prepared are selected from the group consisting of:

13. (Currently amended) A process according to claim ± 26 wherein the indolocarbazole is prepared by reacting a diazo compound having the ring structure

$$0 \xrightarrow{R}_{N_2} R$$

with a biindole having the ring structure

14. (Original) A process according to claim 13 wherein the reaction is carried out in the presence of a transition metal catalyst in a solvent capable of solvating the reactants.

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15. (Original) A process according to claim 13 wherein the coupling reaction is carried out in the presence of a Rh₂(OAc)₄ catalyst.

16. (Currently amended) A process according to claim 13 wherein the diazo compound is a <u>diazolactam</u> and the biindole is a 2,2'-biindole.

Claims 17-18: (Canceled)

19. (Currently amended) A process according to claim <u>27</u> 17 wherein the furanosylated indolocarbazole prepared is K252a.

20. (Currently amended) A product produced by the process of claim <u>27</u> 17.

21. (Currently amended) A process according to claim <u>26</u> 1 wherein the indolocarbazole is reacted with an acetal under conditions that promote acetal exchange.

22. (Previously presented) A process according to claim 3 wherein the preparation is carried out in the presence of a Lewis acid.

23. (Currently amended) A process according to claim 27 47 wherein the biindole is a 2,2' - biindole.

24. (Currently amended) A process according to claim <u>27</u> 17 wherein a Lewis acid is employed.

25. (Canceled)

Claim 26. (New) A process for the preparation of furanosylated indolocarbazoles by reacting an indolocarbazole having the ring structure

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with an acetal having the structure

wherein X is O, under conditions that promote acetal exchange or formation to produce a furanosylated product having the ring structure

wherein R is selected from the group consisting of:

hydrogen;

CH3;

OCH3;

3,4-DMB;

PMB;

Bn;

t-Bu;

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saturated or unsaturated, branched, linear, or cyclic alkyl, heteroalkyl, aryl, and heteroaryl groups; and mixtures of the foregoing, wherein hetero refers to O, S, N, or P.

Claim 27. (New) A process for the preparation of furanosylated indolocarbazoles comprising:

reacting a diazo compound having the ring structure

$$0 \xrightarrow{R}_{N_2} R$$

with a biindole having the ring structure

in the presence of a transition metal catalyst in a solvent capable of solvating the reactants, to produce an indolocarbazole having the ring structure

and then reacting the indolocarbazole with an acetal having the structure

$$R \rightarrow X \rightarrow X \rightarrow R$$
 or $R \rightarrow X \rightarrow R$ or $R \rightarrow X \rightarrow R$

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wherein X is O;

to produce a furanosylated product having the ring structure

wherein R is selected from the group consisting of:

hydrogen;

CH3;

OCH3;

3,4-DMB;

PMB;

Bn;

t-Bu;

saturated or unsaturated, branched, linear, or cyclic alkyl, heteroalkyl, aryl, and heteroaryl groups; and mixtures of the foregoing, wherein hetero refers to O, S, N, or P.